

BMI Metric	Description	Response to Impairment
Richness Measures		
Taxa Richness	Total number of individual taxa	Decrease
Cumulative Taxa	Total number of cumulative taxa	Decrease
Ephemeroptera Taxa	Number of mayfly taxa (genus or species)	Decrease
Plecoptera Taxa	Number of stonefly taxa (genus or species)	Decrease
Trichoptera Taxa	Number of caddisfly taxa (genus or species)	Decrease
EPT Taxa	Number of taxa in the Ephemeroptera (mayfly), Plecoptera (stonefly) and Trichoptera (caddisfly) insect orders	Decrease
Cumulative EPT Taxa (%)	Number of cumulative taxa in the Ephemeroptera (mayfly), Plecoptera (stonefly) and Trichoptera (caddisfly) insect orders	Decrease
Dipteran Taxa	Number of “true” fly taxa, which excludes midges	Increase
Non-Insect Taxa	Number of non-insect taxa	Increase
Composition Measures		
EPT Index (%)	Percent composition of mayfly, stonefly and caddisfly larvae	Decrease
Sensitive EPT Index (%)	Percent composition of mayfly, stonefly and caddisfly larvae with tolerance values between 0 and 3	Decrease
Percent Baetidae	Percent composition of mayfly family nymphs	Decrease
Percent Chironomidae	Percent composition of midge larvae	Increase
Percent Hydropsychidae	Percent composition of caddisfly family nymphs	Decrease
Percent Diptera	Percent composition of “true” fly larvae, which excludes midges	Decrease
Percent Non-insect Taxa	Percent composition of non-insect taxa	Increase
Shannon Diversity Index	General measure of sample diversity that incorporates richness and evenness (Shannon and Weaver 1963)	Decrease
Tolerance/Intolerance Measures		
Tolerance Value (TV)	Value between 0 and 10 weighted for abundance of individuals designated as pollution tolerant (higher values) or intolerant (lower values)	Increase
Percent Intolerant Organisms	Percent of organisms in sample that are highly intolerant to impairment as indicated by a tolerance value of 0, 1 or 2	Decrease
Percent Tolerant Organisms	Percent of organisms in sample that are highly tolerant to impairment as indicated by a tolerance value of 8, 9 or 10	Increase
Percent Dominant Taxon	Percent composition of the single most abundant taxon	Increase
Functional Feeding Groups (FFG)		
Percent Collectors	Percent of macrobenthos that collect or gather fine particulate matter	Increase
Percent Filterers	Percent of macrobenthos that filter fine particulate matter	Increase

Percent Grazers	Percent of macrobenthos that graze upon periphyton	Variable
Percent Predators	Percent of macrobenthos that feed on other organisms	Variable
Percent Shredders	Percent of macrobenthos that shreds coarse particulate matter	Decrease
	Abundance	
Abundance (#/ sample)	Estimated number of BMIs in sample calculated by extrapolating from the proportion of organisms counted in the subsample	Variable